

CAUSES OF CHOLERA.

MEMORIAL

OF THE

AMERICAN MEDICAL ASSOCIATION,

BY

The chairman of the Committee to investigate the Etiology and Pathology of Epidemic Cholera—Dr. T. Winslow Gordon.

AUGUST 5, 1856.—Referred to the Committee on Military Affairs, and ordered to be printed.

To the honorable the Senate and House of Representatives in Congress assembled :

At the late session of the American Medical Association held in the city of Detroit on the sixth, seventh, eighth, and ninth days of May last, the following resolutions were passed, and committee appointed:

Resolved, That a committee of one be appointed, for a period of three years, (with instructions to report progress at each annual meeting of this society,) to investigate the etiology and pathology of epidemic cholera; and that said committee be allowed to add any other members to the same which he may think necessary to further the objects of the appointment.

This resolution was referred to a committee, which reported in favor of its adoption; and it was unanimously adopted by the association.

Thos. W. Gordon, M. D., of Georgetown, Brown county, Ohio, was subsequently appointed said committee, as will be seen by reference to the annexed certificate from one of the secretaries of the American Medical Association, marked A.

At a later date the following resolution, offered by Dr. G. V. Dorsey, was adopted

Resolved by the American Medical Association, That the committee on the etiology and pathology of epidemic cholera be instructed to memorialize the Congress of the United States, requesting that honorable body to grant every necessary assistance which can, or will, promote the objects for which the committee has been appointed. (Paper marked B.)

In complying with the instructions given by the American Medi-

cal Association, it becomes the duty of the undersigned, in the name of the American Medical Association, and on behalf of humanity, to forward to your honorable body a memorial, requesting, in an earnest but respectful manner, that you will grant the necessary means for a most thorough investigation of the cause of this disease, which has so nearly depopulated whole districts of the world, including many portions of our own country.

Perhaps, before proceeding with the memorial, it would be well to give the action of two other medical associations upon this subject; showing that the action of Congress is looked forward to with heartfelt interest by thousands who have often to contend with this dreaded scourge.

At the late annual meeting of the State Medical Society of Indiana, which held its session in the city of Indianapolis, on the 20th, 21st, and 22d days of May last, Dr. West offered the following resolution, which was unanimously adopted:

“*Resolved*, That the Indiana State Medical Society views with the deepest interest the action of the American Medical Association, in relation to an investigation of the etiology and pathology of epidemic cholera; and hereby earnestly requests the Indiana senators and representatives in Congress to lend their influence in favor of a bill which shall afford the committee appointed by the American Medical Association every necessary assistance thoroughly to investigate that dreaded scourge of the human race.”

Dr. Meeker offered a resolution appointing a committee to draught a memorial to Congress in the name of the State Medical Society of Indiana, on the same subject; which memorial was ordered to be placed in the hands of the committee appointed by the American Medical Association, to be presented in conjunction with the memorial ordered by that association. The resolution was unanimously adopted, but the memorial, if prepared, has not arrived. (See paper marked C.)

At the late meeting of the State Medical Society of Ohio, which held its session in the city of Columbus, on the third, fourth, and fifth days of June, the following resolution was offered by Dr. Kincaid, and unanimously adopted by the Society:

“*Resolved*, That the State Medical Society of Ohio views with deep interest the appointment by the American Medical Association of a committee to investigate the etiology and pathology of epidemic cholera, and hereby earnestly requests the senators and representatives in Congress from Ohio to render all assistance in their power towards passing a bill through Congress, granting to said committee every necessary means to make a most thorough investigation of that disease.” (See paper marked D.)

It is hardly necessary to go into a minutely detailed history of Asiatic cholera in a memorial to a learned body of men who have seen or known more or less of its ravages, yet it may be well to refer to some items in relation to investigations heretofore made by embassies sent out by various European governments.

In the report of the Royal Academy of Medicine to the French minister of the interior, in 1831, after stating that the descriptions of the symptomatology were uniform in all reports made by the many who

had examined cases of epidemic cholera, adds: "It would be well, indeed, if the same result could be obtained from the history of its necroscopic character—whether, in consequence of the nature of the researches, it was necessary to surmount greater obstacles; or that habit and ability, zeal and courage, have been wanting to observers, or that preconceived opinions often preside over this subject; or that, lastly, the cadaveric lesions have been variable and uncertain: it has always been the case that the summaries of the investigations have often been different, and sometimes even contradictory." The same report, in speaking of "Kennedy, the author of a work *ex professo* upon the Indian cholera," says: "The cholera consists in a more or less forcible concussion of the eucephalon—a concussion the form of which is entirely unknown to us."

To learn what that form of concussion is, if true, or to endeavor to learn the real cause of the disease, prompted the American Medical Association to appoint a committee upon the subject, and also to instruct that committee to memorialize Congress to render the needed assistance.

The French report above quoted from was made up by men of the first talent of the nation; yet they did not examine the cases, but reported to the minister of the interior from reports of cases examined by others. At the time those reports were made, pathological anatomy was much less understood than now; while the broad fields of observation opened up by the microscope to the investigator in the science of medicine, and especially in microscopic anatomy, was a sealed book. With the present appliances of instruments, and the knowledge obtained since the former observations were made on this subject, it is believed that an investigation, thoroughly critical, will result in showing at least upon what tissue of man's organism the primary impression of epidemic cholera is made; and, probably, also open up the cause producing so dire a disease, and thereby establish a proper and uniform plan of treatment.

In all the embassies sent out to examine epidemic cholera, few have examined more than the external appearances; and those who did, continued their examinations too short a time to add materially to a knowledge of this fearful disease.

The French committee felt this so forcibly, that they say that all the original or new data contained in works published in Russia on the pathological anatomy of epidemic cholera, reduce themselves to four decadal publications of M. Marcus and his colleagues; and although but forty cases were minutely examined, yet more reliance was placed upon them than all others. The following is a quotation from the report:

"Of all the lesions pointed out by M. Marcus, the most important is, without contradiction, the softening of the spinal marrow, especially as out of forty facts collected this softening has been observed nineteen times; and we might say, if elsewhere, and by other observers, this phenomenon has not been noticed, *it is because the researches necessary for ascertaining it were not made, since the spine has but very rarely been opened; and even where it has been, it was seldom with attention and desirable precaution.*"

In the report of the committee on medical science to the American Medical Association in 1850, is found a reference to thirty-three autopsies made in the city of Boston, and published by the city in a "Report on Cholera in the city of Boston in 1849." And yet the only reference made to the pathological condition of the nervous system is in these words: "The brain was almost universally natural; moderate effusion in the meningeal cavities and the ventricles was often found."

The same committee refers to the action of the College of Physicians of Philadelphia, which "appointed a committee to examine the condition of the intestines in cholera."

In this examination the committee brought the microscope into use, and most lucidly detailed the appearances found in that particular field of investigation.

But the investigation was, as in almost all pathological examinations made in relation to cholera, but a partial research, while the etiology has been untouched.

In the present proposed investigation, the committee designs making a most thorough examination, not only of every organ of the human system, but of every tissue, and of every cause which is thought to bear upon the subject, either as primary or secondary.

Were it otherwise, it would not be necessary to ask your honorable body to support the investigation, as partial investigations can be made by individual enterprise; but, in one of the characters proposed, the undivided time of the committee is required, and few, if any, who have means adequate to the undertaking, are willing to perform the labor.

There have been many causes to prevent minute pathological examinations of those who have been struck down, and have perished by cholera. Among the causes is the fact that those making the observations have been frequently, indeed almost always, compelled to treat patients at the time of making those observations, and, consequently, had not the necessary time at their disposal; and it is believed in some instances others failed to make the necessary investigation, from a fear that they would be stricken down by the disease; and have, consequently, hurried over the examination they did make, in a manner which forbid results of importance; completely overlooking changes in some tissues easily noted, and not touching others of the utmost importance in a thorough investigation.

When the investigator's time is limited, or his other duties oppressive, the most fearless are prevented from devoting the patient researches required to elicit the whole truth, or produce valuable results.

No man or limited number of men can have charge of many patients, and devote the necessary time to autopsies; and most especially is this true where an epidemic is raging. And even had they the necessary time, they would be incapacitated by arduous labor, loss of rest, and anxiety about their patients, bringing to bear upon the subject of investigation that cool, deliberate reason and physical research necessary to establish the truth or falsehood of any abstruse proposition, and most especially bring forth the hidden index of

disease, which not only requires the most careful dissections and analysis, but the use of the microscope. The etiology of the disease has not even received the attention paid to its pathology, and to investigate this branch of the subject will require the close attention of the committee; and they should be able to devote their time to it where the disease is not raging among their friends and relations, especially where their families are residing, for few men, if any, are so constituted as to be able to devote their time to an investigation of this kind with the same zeal and lucidness, when oppressed with the belief that their own families are in imminent danger of being prostrated by an epidemic, that they can when their minds are free from any such oppressing cause.

Again, in studying the cause or causes of a disease producing such ravages as cholera does, and following, as it seems to, the most capricious course, by times, it is of the utmost importance to note with great care the hygrometrical, barometrical, thermometrical, and electrical conditions of the atmosphere. For this purpose the best instruments must be obtained and constantly used.

Hygrometrical conditions of the atmosphere in relation to disease, or their influence in producing disease, especially epidemics, have but lately attracted the attention of the medical world. And yet those who have been making observations in this particular branch of noso-poetic causes, believe they are of the very first importance.

In examinations heretofore made in relation to cholera, or other epidemics, no examination of the humidity of the atmosphere has been made, except in one or two instances where individual enterprise has prompted attention to it, in a small district.

Statistics of the prevalence of the disease are now abundant, and most especially of its mortality; and yet those statistics cannot be said to reach all the cases which have occurred, even during the time the tables were being formed, for none will believe that every case reached a record, especially as in this country mortuary statistics have not generally been kept.

But notwithstanding this, the mortality statistics for the year ending June 1, 1850, according to De Bow, show a record of *thirty-one thousand five hundred and six* who fell victims to epidemic cholera. Does not a disease producing such devastation deserve the most critical investigation that is possible to be made, with a hope of staying its ravages?

Should this memorial meet with a hearty response from your honorable body, and a sufficient sum be appropriated to make such an examination as your memorialist believes it deserves, the chairman of the committee will increase the committee to such a number as may be necessary to carry on the investigation in a thorough and critical manner.

There should be, at the very least, three persons who are willing to labor constantly in this field in the most assiduous manner, and when making necroscopical examinations other assistants would sometimes be needed. It would be the wish of the chairman of the committee to proceed with the investigation with as small a corps as could accomplish the work, and yet to not be so circumscribed for

means as to prevent obtaining assistance in circumstances where the regular committee could not perform the necessary service.

He would appoint none but those who would enter the committee with a firm determination to labor faithfully in every place and position which it might be necessary to occupy—whether in the United States or elsewhere—to elucidate as clearly as possible every cause bearing upon the patient to produce the disease; and also to make the most critical examination of those who have become its victims.

To perform this labor faithfully all the various conditions of the atmosphere must be noticed, and in some places the geological structure of the earth, special topography, the quality of water used by the inhabitants, and many other points of observation unnecessary to mention here. But besides these observations of a general character, the most minute examinations must be made of the patients suffering from the disease, and their excretions subjected critically to the microscope.

And many of those who fall victims to the disease must be followed into the dead rooms, there be carefully dissected, and each organ and tissue subjected to as critical an examination as the present advanced state of pathological and microscopical anatomy will permit.

From these combined sources of observation it is hoped a series of reports can be made to the American Medical Association, which will result in staying the fatal progress of epidemic cholera; and most especially does the committee hope, from the length of time allotted to this labor, to be able to present a much larger number of observations than has hitherto been made, and by the proposed manner of making the investigations to be able to present statistical facts which will be of inestimable value in treating and saving those afflicted with the disease.

The United States have taken steps in advance of other nations in many matters which appertain to the happiness and well-being of the world; and although other nations have preceded them in partial investigations upon this subject, yet it is not improbable that a triumphant victory awaits the proposed investigation.

If the object for which the committee was appointed can be accomplished, what will compare with the result?

Among others upon whom it will confer a blessing not to be estimated in dollars and cents, are the army and navy of our country; and not the armies only of the United States, but of all christendom; for very frequently have the armies of the world suffered more severely by this disease than have men in the ordinary walks of life. Nor has the army of the United States been exempted, as will be remembered by all those who resided on the northern frontier when the commander-in-chief sought the bedsides of his dying soldiers and tried to assuage the pain and anguish, and arouse the sinking courage, of men who would most willingly have faced an enemy less relentless, whose weapons were but shot and shell, or the gleaming cutlass. But from this enemy they shrank, and shivered like a child in fear, until the strong man was weaker than the infant in its mother's arms, and trembled like a coward when justice was abroad.

Nor does your memorialist need to refer to scenes in the American

army of twenty years ago. Your honorable body has vivid recollections, no doubt, of the havoc made by this disease in the distant wilds of Kansas, at Fort Riley, among those who go forth to fight the battles of this great republic. Few months have only passed since it spread the utmost consternation there, and swept off many whose worth cannot be estimated.

At the present time, in Brazil, Central America, and Arabia, cholera is sweeping the people with the besom of destruction, while the few sporadic cases occurring in this country are probably but premonitions of an epidemic more or less distant.

A mighty host is swept from the earth annually by this pestilence; and, although but few cases are at this time in the United States, who can say how many months or weeks, nay, how many days or hours, will elapse before it is again sweeping its thousands from our cities, towns, and country?

This is a subject which is not only of interest to us as a nation, but as individuals; for it strikes the high and low, the rich and poor, the laborer at his daily toil, and the statesman in the halls of legislation—the old and young, the hero and the coward, the wise and simple, all bow beneath its stroke; nor does the cheek of beauty turn its shaft away: the mother and her babe together lie “in one” sad “burial blent” by this destroyer of our people.

Who is able to say that the proposed investigation, if carried on as your memorialist believes it should be, will not be the means of turning back the pale messenger, even from the bedside of some of those who shall aid in providing the means for its accomplishment?

Those who enter this critical field of observation may fall victims to the disease; but your memorialist believes they will not fall until they have helped to provide an armor in which, under ordinary circumstances, those who put it on will be able to contend successfully for victory with this disease, which stalks abroad at night and vanquishes in every hour of day.

And should the committee fall victims to the disease, they will fall fighting for victory, and against an enemy which comes not forth on prancing steeds, with banners floating high, and martial music sounding the attack; but in the stillness of the night, when weary nature sinks to rest, steals in with muffled tread, and strikes its unsuspecting victim to the heart, and leaves him cold and clayey before the morning's dawn.

If they fall, they will do it in the line of duty, and nobly die as martyrs in the cause of man's redemption from disease; believing that their country and the world will speak their names in after years, and, too, remember those they leave, who were dependent on their care.

The investigation should, if possible, be made or making before our country is again devastated by cholera in an epidemic form, that if possible a more accurate knowledge of its cause or causes may be obtained, and thereby its havoc prevented. Relying on the necessity and humanity of the cause he advocates, and the profound wish for the advancement of this nation and the world at all times shown by those composing the Congress of the United States, your memorialist

earnestly, but most respectfully, and in the name of the American Medical Association, humbly prays your honorable body to pass a bill in accordance with this memorial, granting such support to the investigation as will cause it to be most comprehensive and critical; and, as in duty bound, your memorialist will ever pray.

T. WINSLOW GORDON, *M. D.*,
*Chairman of the Committee on the Etiology and
 Pathology of Epidemic Cholera.*

A.

DETROIT, *May 14, 1856.*

DEAR SIR: At the late meeting of the American Medical Association, held in this city May 6, 1856, you were appointed chairman of the following committee, with power to add any other members—said committee to be continued three years:

“On the Etiology and Pathology of Epidemic Cholera.”

Please inform me of your acceptance, that it may be placed on file.

Yours, respectfully,

WM. BRODIE,
Secretary American Medical Association, Detroit, Mich.
 Dr. T. W. GORDON.

B.

*To the Chairman of the Committee on the Etiology and Pathology of
 Cholera:*

DEAR SIR: On motion of Dr. Dorsy, of Ohio, it was unanimously *Resolved*, That the Committee on the Etiology and Pathology of Cholera be instructed to memorialize the Congress of the United States, requesting that honorable body to grant every necessary facility and assistance that can or will promote the object for which the committee has been appointed.

Ordered by the American Medical Association at its session in the city of Detroit, May 6, 1856.

WM. BRODIE, *M. D.*,
One of the Secretaries of Am. Medical Association.
 To Dr. T. WINSLOW GORDON,
Chairman of the Committee.

C.

INDIANAPOLIS, INDIANA,
Hall of the State Medical Society, May 22, 1856.

At the present meeting of the Indiana State Medical Society, the following resolutions were unanimously adopted:

By Dr. West :

Resolved, That the Indiana State Medical Society views with the deepest interest the action of the American Medical Association in relation to an investigation of the etiology and pathology of epidemic cholera, and hereby earnestly request the Indiana senators and representatives in Congress to lend their influence in favor of a bill which shall afford the committee appointed by the American Medical Association every necessary assistance to thoroughly investigate that dreaded scourge of the human race.

By Dr. Meeker :

Resolved by the State Medical Society of Indiana, That Dr. R. H. Brower be appointed a committee to draught a memorial to the Congress of the United States, requesting that honorable body to render every assistance in its power to the committee appointed by the American Medical Association on the etiology and pathology of cholera ; and that Dr. Brower forward his memorial to the committee of the American Medical Association, to be by that committee presented to Congress.

WM. LOMAX, *President*.

THOS. B. ELLIOTT, }
T. SHENCOMER, } *Secretaries*.

D.

COLUMBUS, OHIO, *June 5, 1856.*

At the present session of the Ohio State Medical Society holden in this city, Dr. Kincaid offered the following resolution, which was unanimously adopted :

Resolved, That the State Medical Society of Ohio views with deep interest the appointment by the American Medical Association of a committee to investigate the etiology and pathology of epidemic cholera, and hereby earnestly requests the senators and representatives in Congress from Ohio to render all assistance in their power towards passing a bill through Congress granting to said committee every necessary means to make a most thorough investigation of that disease.

S. B. DAVIS,
Secretary of Ohio State Medical Society.

